

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/502,328A  
Source: PT  
Date Processed by STIC: 2/3/06

# ***ENTERED***



PCT

## RAW SEQUENCE LISTING

DATE: 02/03/2006

PATENT APPLICATION: US/10/502,328A

TIME: 11:57:44

Input Set : N:\AMC\J502328A.raw

Output Set: N:\CRF4\02032006\J502328A.raw

1 <110> APPLICANT: Zimmerman, Daniel H  
 2 Charoenvit, Yupin  
 3 Rosenthal, Kenneth  
 4 Whelan, Mike  
 5 <120> TITLE OF INVENTION: METHODS FOR TREATING DISEASES OR CONDITIONS WITH PEPTIDE  
 6 CONSTRUCTS  
 7 <130> FILE REFERENCE: CS-118  
 C--> 8 <140> CURRENT APPLICATION NUMBER: US/10/502,328A  
 9 <141> CURRENT FILING DATE: 2004-07-23  
 10 <150> PRIOR APPLICATION NUMBER: US 60/350,032  
 11 <151> PRIOR FILING DATE: 2002-01-23  
 12 <150> PRIOR APPLICATION NUMBER: US 60/349,982  
 13 <151> PRIOR FILING DATE: 2002-01-23  
 14 <150> PRIOR APPLICATION NUMBER: US 60/349,983  
 15 <151> PRIOR FILING DATE: 2002-01-23  
 16 <150> PRIOR APPLICATION NUMBER: PCT/US03/01816  
 17 <151> PRIOR FILING DATE: 2003-01-23  
 18 <160> NUMBER OF SEQ ID NOS: 28  
 19 <170> SOFTWARE: PatentIn version 3.2  
 21 <210> SEQ ID NO: 1  
 22 <211> LENGTH: 15  
 23 <212> TYPE: PRT  
 24 <213> ORGANISM: Artificial Sequence  
 25 <220> FEATURE:  
 26 <223> OTHER INFORMATION: Completely synthesized peptide construct  
 27 <400> SEQUENCE: 1  
 28 Glu Lys Ala Gly Val Ser Thr Gly Leu Ile Gln Asn Gly Asp  
 29 1 5 10 15  
 31 <210> SEQ ID NO: 2  
 32 <211> LENGTH: 15  
 33 <212> TYPE: PRT  
 34 <213> ORGANISM: Artificial Sequence  
 35 <220> FEATURE:  
 36 <223> OTHER INFORMATION: peptide construct  
 37 <220> FEATURE:  
 38 <221> NAME/KEY: MISC\_FEATURE  
 39 <222> LOCATION: (1)..(1)  
 40 <223> OTHER INFORMATION: acetyl, ClAc, BrAc  
 41 <220> FEATURE:  
 42 <221> NAME/KEY: MISC\_FEATURE  
 43 <222> LOCATION: (1)..(1)  
 44 <223> OTHER INFORMATION: X is A or N and when X is A, then A is either  
 cyclohexylalanine or D-  
 45 alanine

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46 <220> FEATURE:  
 47 <221> NAME/KEY: MISC\_FEATURE  
 48 <222> LOCATION: (15)..(15)  
 49 <223> OTHER INFORMATION: highly variable fragment wherein isoleucine at 143 and  
 leucine at  
 50 159 in contact with CD4 phenylalanine as the 43 residue  
 51 <220> FEATURE:  
 52 <221> NAME/KEY: MOD\_RES  
 53 <222> LOCATION: (15)..(15)  
 54 <223> OTHER INFORMATION: AMIDATION  
 55 <400> SEQUENCE: 2  
 W--> 56 Xaa Gly Gln Glu Glu Lys Ala Gly Val Val Ser Thr Gly Leu Ile  
 57 1 5 10 15  
 59 <210> SEQ ID NO: 3  
 60 <211> LENGTH: 11  
 61 <212> TYPE: PRT  
 62 <213> ORGANISM: Artificial Sequence  
 63 <220> FEATURE:  
 64 <223> OTHER INFORMATION: Completely synthesized peptide construct  
 65 <220> FEATURE:  
 66 <221> NAME/KEY: MOD\_RES  
 67 <222> LOCATION: (1)..(1)  
 68 <223> OTHER INFORMATION: ACETYLTATION, Aad  
 69 <220> FEATURE:  
 70 <221> NAME/KEY: MISC\_FEATURE  
 71 <222> LOCATION: (1)..(1)  
 72 <223> OTHER INFORMATION: acetyl, ClAc, BrAc  
 73 <220> FEATURE:  
 74 <221> NAME/KEY: MISC\_FEATURE  
 75 <222> LOCATION: (1)..(1)  
 76 <223> OTHER INFORMATION: X is A or E and when X is A, then A is either  
 cyclohexylalanine or D-  
 77 alanine  
 78 <220> FEATURE:  
 79 <221> NAME/KEY: MOD\_RES  
 80 <222> LOCATION: (11)..(11)  
 81 <223> OTHER INFORMATION: AMIDATION  
 82 <400> SEQUENCE: 3  
 W--> 83 Xaa Glu Thr Val Gly Val Ser Gln Leu Glu Val  
 84 1 5 10  
 86 <210> SEQ ID NO: 4  
 87 <211> LENGTH: 15  
 88 <212> TYPE: PRT  
 89 <213> ORGANISM: Artificial Sequence  
 90 <220> FEATURE:  
 91 <223> OTHER INFORMATION: Completely synthesized peptide construct  
 92 <400> SEQUENCE: 4  
 93 Asn Gly Gln Glu Thr Val Gly Val Ser Ser Thr Gln Leu Ile  
 94 1 5 10 15  
 96 <210> SEQ ID NO: 5  
 97 <211> LENGTH: 18

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Input Set : N:\AMC\J502328A.raw

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98 <212> TYPE: PRT
99 <213> ORGANISM: Artificial Sequence
100 <220> FEATURE:
101 <223> OTHER INFORMATION: Completely synthesized peptide construct
102 <400> SEQUENCE: 5
103      Asn Gly Gln Glu Glu Lys Ala Gly Val Val Ser Thr Gly Leu Ile Gly
104      1              5              10              15
105      Gly Gly
107 <210> SEQ ID NO: 6
108 <211> LENGTH: 14
109 <212> TYPE: PRT
110 <213> ORGANISM: Artificial Sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: Completely synthesized peptide construct
113 <220> FEATURE:
114 <221> NAME/KEY: MISC_FEATURE
115 <222> LOCATION: (1)..(1)
116 <223> OTHER INFORMATION: cyclohexylalanine, D-alanine, acetyl, ClAc, BrAc
117 <220> FEATURE:
118 <221> NAME/KEY: MISC_FEATURE
119 <222> LOCATION: (1)..(1)
120 <223> OTHER INFORMATION: Xaa is an amino acid V, L, I, G or A
121 <220> FEATURE:
122 <221> NAME/KEY: MISC_FEATURE
123 <222> LOCATION: (4)..(4)
124 <223> OTHER INFORMATION: Xaa is an amino acid V, L, I, G or A
125 <220> FEATURE:
126 <221> NAME/KEY: MISC_FEATURE
127 <222> LOCATION: (6)..(6)
128 <223> OTHER INFORMATION: Xaa is an amino acid V, L, I, G or A
129 <400> SEQUENCE: 6
W--> 130      Xaa Glu Thr Xaa Gly Xaa Ser Gln Leu Glu Val Gly Gly Gly
131      1              5              10
133 <210> SEQ ID NO: 7
134 <211> LENGTH: 18
135 <212> TYPE: PRT
136 <213> ORGANISM: Artificial Sequence
137 <220> FEATURE:
138 <223> OTHER INFORMATION: Completely synthesized peptide construct
139 <220> FEATURE:
140 <221> NAME/KEY: MISC_FEATURE
141 <222> LOCATION: (1)..(1)
142 <223> OTHER INFORMATION: acetyl, ClAc, BrAc
143 <220> FEATURE:
144 <221> NAME/KEY: MISC_FEATURE
145 <222> LOCATION: (1)..(1)
146 <223> OTHER INFORMATION: X is A or D and when X is A, then A is either
cyclohexylalanine or D-
147      alanine
148 <220> FEATURE:

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149 <221> NAME/KEY: MISC_FEATURE
150 <222> LOCATION: (6)..(6)
151 <223> OTHER INFORMATION: Xaa is an amino acid V, L, I, G or A
152 <220> FEATURE:
153 <221> NAME/KEY: MOD_RES
154 <222> LOCATION: (18)..(18)
155 <223> OTHER INFORMATION: AMIDATION
156 <400> SEQUENCE: 7
W--> 157      Xaa Gly Gln Glu Glu Xaa Ala Gly Val Val Ser Thr Gly Leu Ile Gly
158          1              5              10              15
159          Gly Gly
161 <210> SEQ ID NO: 8
162 <211> LENGTH: 17
163 <212> TYPE: PRT
164 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: Completely synthesized peptide construct
167 <220> FEATURE:
168 <221> NAME/KEY: MISC_FEATURE
169 <222> LOCATION: (1)..(1)
170 <223> OTHER INFORMATION: acetyl, ClAc, BrAc
171 <220> FEATURE:
172 <221> NAME/KEY: MISC_FEATURE
173 <222> LOCATION: (1)..(1)
174 <223> OTHER INFORMATION: X is A or G and when X is A, then A is either
cyclohexylalanine or D-
175      alanine
176 <220> FEATURE:
177 <221> NAME/KEY: MOD_RES
178 <222> LOCATION: (17)..(17)
179 <223> OTHER INFORMATION: AMIDATION
180 <400> SEQUENCE: 8
W--> 181      Xaa Gln Glu Glu Lys Ala Gly Val Val Ser Thr Gly Leu Ile Gly Gly
182          1              5              10              15
183          Gly
185 <210> SEQ ID NO: 9
186 <211> LENGTH: 18
187 <212> TYPE: PRT
188 <213> ORGANISM: Artificial Sequence
189 <220> FEATURE:
190 <223> OTHER INFORMATION: Completely synthesized peptide construct
191 <220> FEATURE:
192 <221> NAME/KEY: MISC_FEATURE
193 <222> LOCATION: (1)..(1)
194 <223> OTHER INFORMATION: acetyl, ClAc, BrAc
195 <220> FEATURE:
196 <221> NAME/KEY: MISC_FEATURE
197 <222> LOCATION: (1)..(1)
198 <223> OTHER INFORMATION: X is A or D and when X is A, then A is either
cyclohexylalanine or D-
199      alanine

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TIME: 11:57:44

Input Set : N:\AMC\J502328A.raw

Output Set: N:\CRF4\02032006\J502328A.raw

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200 <220> FEATURE:
201 <221> NAME/KEY: MISC_FEATURE
202 <222> LOCATION: (6)..(6)
203 <223> OTHER INFORMATION: Xaa is an amino acid V, L, I, G, A, K or F
204 <220> FEATURE:
205 <221> NAME/KEY: MISC_FEATURE
206 <222> LOCATION: (6)..(6)
207 <223> OTHER INFORMATION: analogues such as substituted epsilon amino (methyl, alkyl)
208     Lysine or hydroxy-Leucine or Leucine
209 <220> FEATURE:
210 <221> NAME/KEY: MOD_RES
211 <222> LOCATION: (18)..(18)
212 <223> OTHER INFORMATION: AMIDATION
213 <400> SEQUENCE: 9
W--> 214     Xaa Gly Gln Glu Glu Xaa Ala Gly Val Val Ser Thr Gly Leu Ile Gly
      215         1             5             10             15
      216         Gly Gly
218 <210> SEQ ID NO: 10
219 <211> LENGTH: 18
220 <212> TYPE: PRT
221 <213> ORGANISM: Artificial Sequence
222 <220> FEATURE:
223 <223> OTHER INFORMATION: Completely synthesized peptide construct
224 <220> FEATURE:
225 <221> NAME/KEY: MISC_FEATURE
226 <222> LOCATION: (1)..(1)
227 <223> OTHER INFORMATION: acetyl, ClAc, BrAc
228 <220> FEATURE:
229 <221> NAME/KEY: MISC_FEATURE
230 <222> LOCATION: (1)..(1)
231 <223> OTHER INFORMATION: X is A or D and when X is A, then A is either
cyclohexylalanine or D-
      232         alanine
233 <220> FEATURE:
234 <221> NAME/KEY: MOD_RES
235 <222> LOCATION: (18)..(18)
236 <223> OTHER INFORMATION: AMIDATION
237 <400> SEQUENCE: 10
W--> 238     Xaa Gly Gln Glu Glu Phe Ala Gly Val Val Ser Thr Gly Leu Ile Gly
      239         1             5             10             15
      240         Gly Gly
242 <210> SEQ ID NO: 11
243 <211> LENGTH: 10
244 <212> TYPE: PRT
245 <213> ORGANISM: Artificial Sequence
246 <220> FEATURE:
247 <223> OTHER INFORMATION: Completely synthesized peptide construct
248 <220> FEATURE:
249 <221> NAME/KEY: MISC_FEATURE
250 <222> LOCATION: (1)..(1)

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RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 02/03/2006  
PATENT APPLICATION:    US/10/502,328A      TIME: 11:57:45

Input Set : N:\AMC\J502328A.raw  
Output Set: N:\CRF4\02032006\J502328A.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; Xaa Pos. 1  
Seq#:3; Xaa Pos. 1  
Seq#:6; Xaa Pos. 1,4,6  
Seq#:7; Xaa Pos. 1,6  
Seq#:8; Xaa Pos. 1  
Seq#:9; Xaa Pos. 1,6  
Seq#:10; Xaa Pos. 1  
Seq#:11; Xaa Pos. 1  
Seq#:12; Xaa Pos. 1  
Seq#:13; Xaa Pos. 1  
Seq#:14; Xaa Pos. 1  
Seq#:15; Xaa Pos. 1  
Seq#:16; Xaa Pos. 1  
Seq#:17; Xaa Pos. 1  
Seq#:18; Xaa Pos. 1  
Seq#:19; Xaa Pos. 1  
Seq#:20; Xaa Pos. 1  
Seq#:22; Xaa Pos. 1  
Seq#:23; Xaa Pos. 1  
Seq#:24; Xaa Pos. 1  
Seq#:25; Xaa Pos. 1  
Seq#:26; Xaa Pos. 1,18  
Seq#:27; Xaa Pos. 1  
Seq#:28; Xaa Pos. 1

**Invalid Line Length:**

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 5  
Seq#:2; Line(s) 44,49  
Seq#:3; Line(s) 76  
Seq#:7; Line(s) 146  
Seq#:8; Line(s) 174  
Seq#:9; Line(s) 198,207  
Seq#:10; Line(s) 231  
Seq#:11; Line(s) 255  
Seq#:12; Line(s) 278  
Seq#:13; Line(s) 301  
Seq#:14; Line(s) 324  
Seq#:15; Line(s) 347  
Seq#:16; Line(s) 370  
Seq#:17; Line(s) 393  
Seq#:18; Line(s) 416

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 02/03/2006  
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Input Set : N:\AMC\J502328A.raw  
Output Set: N:\CRF4\02032006\J502328A.raw

Seq#:19; Line(s) 435  
Seq#:20; Line(s) 454  
Seq#:21; Line(s) 474  
Seq#:22; Line(s) 497,502  
Seq#:23; Line(s) 521,530  
Seq#:24; Line(s) 553  
Seq#:25; Line(s) 574  
Seq#:26; Line(s) 599  
Seq#:27; Line(s) 636  
Seq#:28; Line(s) 661,666



## VERIFICATION SUMMARY

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Input Set : N:\AMC\J502328A.raw

Output Set: N:\CRF4\02032006\J502328A.raw

L:8 M:270 C: Current Application Number differs, Wrong Format  
L:56 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:83 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:181 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:262 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
L:285 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:308 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0  
L:331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0  
L:354 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0  
L:400 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0  
L:419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
L:438 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:461 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0  
L:509 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0  
L:537 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0  
L:556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0  
L:581 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0  
L:618 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0  
L:620 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:16  
L:643 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0  
L:672 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0